

National Blood Programs In Developed Countries

Presented by

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Study Objectives

National Blood Programs

- **Extent operated as single national system**
- **Span of authority of person responsible**
- **Government relationship of national program**
- **Sources of funding**
- **Structure for governance and policy**

Blood Collected by Blood Programs in Countries Studied, 1993

| <u>Country</u> | <u>Total Number of Units Collected</u> | <u>Units/1,000 Population</u> |
|----------------|--|-------------------------------|
| Australia | 884,651 | 52.5 |
| Austria | 449,305 | 58.6 |
| Canada | 1,171,181 | 43.6 |
| England/Wales | 2,280,000 | 44.4 |
| Finland | 297,748 | 59.6 |
| France | 3,228,000 | 56.5 |
| Israel | 191,000 | 42.7 |
| Italy | NA* | -- |
| Japan | 7,175,617 | 57.8 |
| Netherlands | 818,600 | 54.5 |
| Scotland | 289,000 | 56.9 |
| Sweden | 440,000 | 51.4 |
| Switzerland | 599,664 | 88.4 |
| Taiwan | 1,066,082 | 51.6 |
| Total | 18,862,848 | |
| United States+ | 13,794,000 | 53.5 |
| Worldwide | 75,000,000 | N/A |

* *Not available*

+ *Data provided for comparison only*

Presence of National Blood Program

| <u>Country</u> | <u>National Program</u> | | <u>Red Cross Involved</u> | |
|----------------|-------------------------|-------------|---------------------------|-------------|
| | <u>1993</u> | <u>2004</u> | <u>1993</u> | <u>2004</u> |
| Australia | Yes | Yes | Yes | Yes |
| Austria | No | No | Yes | ? |
| Canada | Yes | Yes | Yes | No |
| England/Wales | Yes | Yes | No | No |
| Finland | Yes | Yes | Yes | No |
| France | Yes? | Yes? | No | No |
| Israel | Yes | Yes | MDA | MDA |
| Italy | No | No | No | No |
| Japan | Yes | Yes | Yes | ? |
| Netherlands | Yes | ? | Yes | No |
| Scotland | Yes | Yes | No | No |
| Sweden | No | No | No | No |
| Switzerland | Yes? | ? | Yes | No |
| Taiwan | Yes | Yes | No | No |
| United States+ | No | No | Yes | Yes |

** Independent blood centers belong to the Public Health Services*

+ Data provided for comparison only

Operational Authority of the Person Most Responsible for the Nation's Blood Supply

| <u>Country</u> | <u>National Program</u> | <u>Donor Recruitment</u> | <u>Nursing/ Blood Collection</u> | <u>Laboratory</u> | <u>Inventory Management</u> |
|----------------|-------------------------|--------------------------|--------------------------------------|-------------------|-----------------------------|
| Australia | Yes | No* | No | No | No |
| Austria | No | No | No | No | No |
| Canada | Yes | Yes | Yes | Yes | Yes |
| England/Wales | Yes | No | No | No | No |
| Finland | Yes | Yes | Yes | Yes | Yes |
| France | Yes? | No | No | No | No |
| Israel | Yes | Yes | Yes | Yes | Yes |
| Italy | No | No | No | No | No |
| Japan | Yes | Yes | Yes | Yes | Yes |
| Netherlands | Yes | No | No | No | No |
| Scotland | Yes | Yes | Yes | Yes | Yes |
| Sweden | No | No | No | No | No |
| Switzerland | Yes? | Yes | Yes | Yes | Yes |
| Taiwan | Yes | Yes | Yes | Yes | Yes |
| United States+ | No | No | No | No | No |

* Blood Transfusion Director in charge of 8 division blood transfusion services

+ Data provided for comparison only

Management Authority of the Person Most Responsible for the Nation's Blood Supply

| <u>Country</u> | <u>National Program</u> | <u>Finance & Accounting</u> | <u>Public Relations</u> | <u>Personnel</u> | <u>Admin. & Management</u> | <u>Computer Systems</u> | <u>Bldgs. & Facilities</u> |
|----------------|-------------------------|---------------------------------|-------------------------|------------------|--------------------------------|-------------------------|--------------------------------|
| Australia | Yes | No | No | No | No | No | No |
| Austria | No | No | No | No | No | No | No |
| Canada | Yes | Yes | No | Yes | Yes | Yes | No |
| England/Wales | Yes | No | No | No | No | No | No |
| Finland | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| France | Yes? | No | No | No | No | No | No |
| Israel | Yes | No | No | No | No | No | No |
| Italy | No | No | No | No | No | No | No |
| Japan | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Netherlands | Yes | No | No | No | No | No | No |
| Scotland | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Sweden | No | No | No | No | No | No | No |
| Switzerland | Yes? | Yes | Yes | Yes | Yes | Yes | Yes |
| Taiwan | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| United States+ | No | No | No | No | No | No | No |

+ Data provided for comparison only

Computers in Manufacturing

| | |
|-------------------|----|
| ❖ Total countries | 14 |
| ❖ Use computers | 11 |
| ♦ Single system | 6 |
| ♦ Two systems | 3 |
| ♦ > two systems | 2 |

USA uses multiple systems

Sources of Funding of Blood Program (%)

| <u>Country</u> | <u>Government</u> | <u>Patient Charges</u> | <u>Donations</u> | <u>Non-blood product sales</u> |
|----------------|-------------------|------------------------|------------------|--------------------------------|
| Australia | 98* | 0 | 0 | 0 |
| Austria | 0 | 70 | 0 | 30 |
| Canada | 100 | 0 | 0 | 0 |
| England/Wales | 100 | 0 | 0 | 0 |
| Finland | 0 | 55 | 0 | 45 |
| France | 70 | 0 | 0 | 30 |
| Israel | 80** | | 5 | 10 |
| Italy | NR+ | NR | NR | NR |
| Japan | 0 | 99~ | 0 | 0 |
| Netherlands | 0 | 100 | 0 | 0 |
| Scotland | NR | NR | NR | NR |
| Sweden | 80/100++ | 0 | 0 | 0 |
| Switzerland | 0 | 100 | 0 | 0 |
| Taiwan | 0 | 94 | 0 | 0 |
| United States | 0 | 96 | 1 | 3 |

*60% state government, 38% federal government

**Government and patient charges (breakdown not available)

+ Not reported

++ When not including plasma fractionation costs

~ Plasma

Sources of Funds

- ❖ **Government**
 - ◆ Total national
 - ◆ National and government hospitals
 - ◆ National and regional government
- ❖ **Mixed**
 - ◆ National and private hospitals
 - ◆ National and insurance
- ❖ **Private**
 - ◆ Insurance

Budget Approval Mechanism

| <u>Country</u> | <u>National head proposes budget</u> | <u>% of funds from government</u> | <u>Group making final budget authorization</u> |
|----------------|--------------------------------------|-----------------------------------|--|
| Australia | No | 98 | Red Cross Regions |
| Austria | No | 0 | Government Regions |
| Canada | Yes | 100 | Provincial Ministers of Health |
| England/Wales | No | 100 | Regional health authorities |
| Finland | Yes | 0 | Finnish Red Cross |
| France | Yes | 70 | Ministry of Health |
| Israel | Yes | 80 | Magen David Adom |
| Italy | No | NR | Ministry of Health |
| Japan | Yes | 0 | Japanese Red Cross |
| Netherlands | No | 0 | Insurance companies |
| Scotland | Yes | NR | National Health Service |
| Sweden | No | 100 | Local hospital boards |
| Switzerland | Yes | 0 | Coordinating Board |
| Taiwan | Yes | 0 | Ministry of Health |
| United States | Not applicable | 0 | Not applicable |

* Data provided for comparison only

Governance Structures

Type A

Plan national production

Control operations

Authority Limited

Central admin/finance

Single \$\$\$ source

Single report

Type AA

Production from regions

Coordinate operations (region)

Authority Minimal

Admin/finance separate

Multiple \$\$\$ source

Mutiple reporting

Regulatory Systems

| <u>Country</u> | <u>National Program</u> | <u>Government Standards</u> | <u>Government Inspection</u> | <u>Voluntary Inspection</u> |
|----------------|-------------------------|-----------------------------|------------------------------|-----------------------------|
| Australia | Yes | Yes | Yes | Yes |
| Austria | No | Yes | Yes | Yes |
| Canada | Yes | Yes | Yes | No |
| England/Wales | Yes | Yes | Yes | Yes |
| Finland | Yes | Yes | Yes | Yes |
| France | Yes? | Yes | Yes | Yes |
| Israel | Yes | Yes | No | No |
| Italy | No | No | No | No |
| Japan | Yes | Yes | Yes | No |
| Netherlands | Yes | No | No | Yes |
| Scotland | Yes | Yes | Yes | Yes |
| Sweden | No | Yes | No | No |
| Switzerland | Yes? | Yes | No | Yes |
| Taiwan | Yes | Yes | Yes | No |
| United States | No | Yes | Yes | Yes |

Summary – Most Programs

- ❖ Programs are not “total”
- ❖ No national usage data
- ❖ Production goals fragmented
- ❖ National organization coordinates
- ❖ Little inventory sharing
- ❖ Budget approval and governance differ
- ❖ Multiple sources of funds
 - ◆ No central approval
- ❖ Admin/MGT may differ from operations

Characteristics of Ideal Program

- ❖ **Monitors national use**
- ❖ **Plans national production**
- ❖ **Advisory board of experts**
- ❖ **Clearly defined “policy” makers**
- ❖ **Single responsible head**
- ❖ **Clear governance: internal and external**
- ❖ **Operations authority**
- ❖ **MGT/ADM Authority**
- ❖ **Head develops/proposes budget**
- ❖ **Single/multiple revenue sources**
 - ◆ **Aggregated into single budget**
- ❖ **Central inventory management**